ELSEVIER

Nuclear Instruments and Methods in Physics Research A 391 (1997) 529–537

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH Section A

Author index

Abdel-Aal, R.E. and M.N. Al-Haddad, Determination of radioisotopes in gamma-ray spectroscopy using abductive machine learning . . . 391 (1997) 275
Ahola, K., see Valtonen, E. . . . 391 (1997) 249
Aïche, M., M.M. Aléonard, B. Balauge, G. Barreau, F. Bourgine, D. Cabaussel, J.F. Chemin, C. Diarra, J.P. Goudour, M. Harston, H. Rasolofo, J.N. Scheurer, A. Brondi, G. La Rana, R. Moro, E. Vardaci and D. Curien, The DIAMANT electronics and data acquisition system . . . 391 (1997) 329
Akimov, D., S. Belogurov, A. Burenkov, D. Churakov, V. Kuzichev, V. Morgunov, G. Smirnov and V. Solovov, Scintillation proportional Xe counter with WLS fiber readout for low-energy X-rays . . . 391 (1997) 468
Aléonard, M.M., see Aïche, M. . . . 391 (1997) 329
Alexahin, Y.I., On the emittance growth due to noise in hadron colliders and methods of its suppression . . . 391 (1997) 73
Al-Haddad, M.N., see Abdel-Aal, R.E. . . . 391 (1997) 275
Allinson, N.M., see Castelli, C.M. . . . 391 (1997) 481
Andresen, H.G., see Aulenbacher, K. . . . 391 (1997) 498
Aphecetche, L., see Martínez, G. . . . 391 (1997) 435
Arnold, J.D., S.V. Koutin, A.D. Krisch, V.G. Luppov, T.S. Nurushev, R.S. Raymond, Yu.M. Melnik and A.F. Prudkoglyad, A cryocondensation pump for a high-density atomic hydrogen jet target . . . 391 (1997) 398
Aulenbacher, K., Ch. Nachtigall, H.G. Andresen, J. Bermuth, Th. Dombo, P. Drescher, H. Euteneuer, H. Fischer, D.v. Harrach, P. Hartmann, J. Hoffmann, P. Jennewein, K.H. Kaiser, S. Köbis, H.J. Kreidel, J. Langbein, M. Petri, S. Plützer, E. Reichert, M. Schemies, H.-J. Schöpe, K.-H. Steffens, M. Steigerwald, H. Trautner and Th. Weis, The MAMI source of polarized electrons . . . 391 (1997) 498

Baird, S., D. Berlin, J. Boillot, J. Bosser, M. Brouet, J. Buttkus, F. Caspers, V. Chohan, D. Dekkers, T. Eriksson, R. Garoby, R. Giannini, O. Grobner, J. Gruber, J.Y. Hemery, H. Koziol, R. Maccaferri, S. Maury, C. Metzger, K. Metzmacher, D. Möhl, H. Mulder, M. Paoluzzi, F. Pedersen, J.P. Riunaud, C. Serre, D.J. Simon, G. Tranquille, J. Tuyn and B. Williams, The Antiproton Decelerator: AD . . . 391 (1997) 210
Baird, S., J. Bosser, J. Broere, C. Carli, M. Chanel, C. Hill, R. Ley, A. Lombardi, R. Maccaferri, S. Maury, I. Meshkov, D. Mohhl, G. Molinari, H. Mulder, E. Syresin, E. Tanke, G. Tranquille, F. Varenne and M. Vretenar, Recent results on lead-ion accumulation in LEAR for the LHC . . . 391 (1997) 17
Balauge, B., see Aïche, M. . . . 391 (1997) 329
Ball, M.S., see Nagaitsev, S. . . . 391 (1997) 32
Barnett, S.J., see Castelli, C.M. . . . 391 (1997) 481
Barreau, G., see Aïche, M. . . . 391 (1997) 329
Barton, C.J., R.L. Gill, R.F. Casten, D.S. Brenner, N.V. Zamfir and A. Zilges, Coulomb excitation of radioactive nuclear beams in inverse kinematics . . . 391 (1997) 289
Baur, G., see PS210 Collaboration . . . 391 (1997) 201
Bea, J., see García-Raffi, L.M. . . . 391 (1997) 461
Beche, J.-F., see Datte, P. . . . 391 (1997) 471
Beckert, K., see Winkler, T. . . . 391 (1997) 12
Belogurov, S., see Akimov, D. . . . 391 (1997) 468
Berlin, D., see Baird, S. . . . 391 (1997) 210
Bermuth, J., see Aulenbacher, K. . . . 391 (1997) 498
Beuville, E., see Datte, P. . . . 391 (1997) 471
Bisoffi, G., see Tecchio, L. . . . 391 (1997) 147
Boero, G., see PS210 Collaboration . . . 391 (1997) 201
Bogatyrjov, V.A., see Gurzhiev, A.N. . . . 391 (1997) 417
Boillot, J., see Baird, S. . . . 391 (1997) 210
Bosch, F., see Winkler, T. . . . 391 (1997) 12
Bosser, J., R. Ley, Yu. Korotaev, R. Maccaferri, I. Meshkov, D. Mohl, G. Molinari, A. Smirnov, E. Syresin, G. Tranquille and F. Varenne, Active methods of instability suppression in a neutralized electron beam . . . 391 (1997) 110
Bosser, J., R. Ley, Yu. Korotaev, R. Maccaferri, I. Meshkov, G. Molinari, V. Polyakov, A. Smirnov, E. Syresin, G. Tranquille and F. Varenne, Experimental studies of electron beam neutralisation . . . 391 (1997) 103
Bosser, J., see Baird, S. . . . 391 (1997) 17

0168-9002/97/$17.00 Copyright © 1997 Elsevier Science B.V. All rights reserved

Bosser, J., see Baird, S. 391 (1997) 210
Bourgine, F., see Aïche, M. 391 (1997) 329
Brauksiepe, S., see PS210 Collaboration 391 (1997) 201
Brenner, D.S., see Barton, C.J. 391 (1997) 289
Broere, J., see Baird, S. 391 (1997) 17
Brondi, A., see Aïche, M. 391 (1997) 329
Brouet, M., see Baird, S. 391 (1997) 210
Burenkov, A., see Akimov, D. 391 (1997) 468
Burov, A., see Tecchio, L. 391 (1997) 147
Buttkus, J., see Baird, S. 391 (1997) 210
Buzzo, A., P. Musico, M. Pallavicini, C. Patrignani and E. Robutti, A Silicon Pad Detector for E-835 experiment at Fermilab 391 (1997) 443
Buzzo, A., see PS210 Collaboration 391 (1997) 201

Cabaussel, D., see Aïche, M. 391 (1997) 329
Cabauy, P., see Fedchak, J.A. 391 (1997) 405
Calabrese, R., see Tecchio, L. 391 (1997) 147
Carlén, L., S. Garpman, H.-Å. Gustafsson, H. Löhner, J. Nystrand, A. Oskarsson, I. Otterlund, T. Svensson, E. Stenlund, K. Söderström and H.J. Whitlow, Two-dimensional electronic readout system for multi-step-avalanche chambers 391 (1997) 492
Carli, C., see Baird, S. 391 (1997) 17
Caspers, F., Yu. Korotaev, I. Meshkov, A. Petrov, Y. Rao, A. Smirnov, E. Syresin, F. Varenne and X. Yang, Diagnostics of a neutralised electron beam on the JINR test bench 391 (1997) 128
Caspers, F., see Baird, S. 391 (1997) 210
Castellano, M., Transition Undulator Radiation (TUR) as a beam diagnostics and a high brilliance infrared source 391 (1997) 375
Castellano, M., L. Catani, M. Ferrario, S. Kulinski, M. Minestrini, P. Patteri, S. Tazzari and F. Tazzioli, Commissioning and operating experience with the LISA superconducting accelerator 391 (1997) 385
Castelli, C.M., N.M. Allinson, S.J. Barnett, G.F. Clark, K. Moon, C.R. Whitehouse and A. Wells, CCDs for X-ray topography at synchrotrons 391 (1997) 481
Casten, R.F., see Barton, C.J. 391 (1997) 289
Catani, L., see Castellano, M. 391 (1997) 385
Chanel, M., see Baird, S. 391 (1997) 17
Charbonnier, Y., see Martínez, G. 391 (1997) 435
Chemin, J.F., see Aïche, M. 391 (1997) 329
Chohan, V., see Baird, S. 391 (1997) 210
Churakov, D., see Akimov, D. 391 (1997) 468
Church, M., Stochastic cooling at Fermilab 391 (1997) 172
Ciullo, G., see Tecchio, L. 391 (1997) 147
Clark, G.F., see Castelli, C.M. 391 (1997) 481
Clauser, T., see Tecchio, L. 391 (1997) 147
Collé, R. and R. Kishore, An update on the NIST random-in-water standard generator: its performance efficacy and long-term stability 391 (1997) 511
Cork, C., see Datte, P. 391 (1997) 471
Cummings, W.J., see Fedchak, J.A. 391 (1997) 405
Curien, D., see Aïche, M. 391 (1997) 329

Dainelli, A., see Tecchio, L. 391 (1997) 147
Danared, H., Electron cooling at CRYRING with an expanded electron beam 391 (1997) 24
Danilov, V.V. and E.A. Perevedentsev, Feedback system for elimination of the transverse mode coupling instability 391 (1997) 77
Datte, P., E. Beuville, J.-F. Beche, C. Cork, T. Earnest, J. Millaud, D. Nygren, H. Padmore, B. Turko and N.-H. Xuong, A prototype 8×8 pixel array X-ray detector for protein crystallography 391 (1997) 471
Dekkers, D., see Baird, S. 391 (1997) 210
del Peral, L. and M.D. Rodríguez-Frías, Method to infer about the nuclear UHE cosmic-ray composition from the EAS lateral development 391 (1997) 239
Delagrange, H., see Martínez, G. 391 (1997) 435
Depaola, G.O., Monte Carlo simulation of the ARGO 391 (1997) 269
Derenchuk, V., see Nagaitsev, S. 391 (1997) 32
Diarra, C., see Aïche, M. 391 (1997) 329
Dikansky, N.S., see Tecchio, L. 391 (1997) 147
Di Massa, G., see Tecchio, L. 391 (1997) 147

Dombo, Th., see Aulenbacher, K. 391 (1997) 498
Dragoun, O., M. Ryšavý and A. Špalek, Statistical tests of invariability of the measurement conditions in the β-ray spectroscopy 391 (1997) 345
Drescher, P., see Aulenbacher, K. 391 (1997) 498

Earnest, T., see Datte, P. 391 (1997) 471
Eickhoff, H., see Winkler, T. 391 (1997) 12
Ellison, M.J., see Nagaitsev, S. 391 (1997) 32
Ellison, T.J.P., see Nagaitsev, S. 391 (1997) 32
Eriksson, T., see Baird, S. 391 (1997) 210
Erlandsson, K. and S.-E. Strand, 3D reconstruction for 2D PET 391 (1997) 369
Eronen, T., see Valtonen, E. 391 (1997) 249
Euteneuer, H., see Aulenbacher, K. 391 (1997) 498
Eyrich, W., see PS210 Collaboration 391 (1997) 201

Faszer, W. and R. Henderson, A wire stringing machine for multiwire proportional chambers and planar drift chambers 391 (1997) 507
Fedchak, J.A., P. Cabauy, W.J. Cummings, C.E. Jones and R.S. Kowalczyk, Silane coatings for laser-driven polarized hydrogen sources and targets 391 (1997) 405
Ferrario, M., see Castellano, M. 391 (1997) 385
Filipchenko, A., E. Gorniker, A. Kalinin, V. Korchuganov, G. Kulipanov, G. Kurkin, E. Levichev, Yu. Matveev, V. Sajaev, V. Ushakov, A. Kadnikov, Yu. Krylov, D. Odintsov, S. Pesterev, V. Stankevich, V. Ushkov, A. Valentinov, Yu. Yupinov and A. Zabelin, First results obtained for the KSRS design parameters 391 (1997) 160
Fischer, H., see Aulenbacher, K. 391 (1997) 498
Fomichev, A.S., see Rodin, A.M. 391 (1997) 228
Franzke, B., see Winkler, T. 391 (1997) 12
Fukushima, M., see Satpathy, A. 391 (1997) 423

Gadea, A., see García-Raffi, L.M. 391 (1997) 461
Galinskiy, V.B., see Rodin, A.M. 391 (1997) 228
García-Raffi, L.M., J.L. Taín, J. Bea, A. Gadea, J. Rico and B. Rubio, Monte Carlo simulation of Compton polarimeters 391 (1997) 461
Garoby, R., see Baird, S. 391 (1997) 210
Garpman, S., see Carlén, L. 391 (1997) 492
Gerber, D., see Tadsen, A. 391 (1997) 310
Geyer, R., see PS210 Collaboration 391 (1997) 201
Giannini, R., see Baird, S. 391 (1997) 210
Gill, R.L., see Barton, C.J. 391 (1997) 289
Gleibman, E.M., V.M. Zhabitsky, I.N. Ivanov, G.I. Kononov, N.I. Lebedev, A.G. Likhachev, V.A. Melnikov, N.A. Malakhov, N.V. Pilyar, T.V. Rukojatkina, A.S. Scheulin, S.E. Merker and M.S. Mikheev, System for initial betatron oscillation damping for UNK I stage beam 391 (1997) 100
Gorniker, E., see Filipchenko, A. 391 (1997) 160
Gorshkov, V.A., see Rodin, A.M. 391 (1997) 228
Goudour, J.P., see Aïche, M. 391 (1997) 329
Grobner, O., see Baird, S. 391 (1997) 210
Gruber, J., see Baird, S. 391 (1997) 210
Grunhaus, J. and S. Kananov, Separation of γ/π^0 showers at high energies 391 (1997) 351
Grzonka, D., see PS210 Collaboration 391 (1997) 201
Guidi, V., see Tecchio, L. 391 (1997) 147
Gurzhiev, A.N., L.K. Turchanovich, V.G. Vasil'chenko, V.A. Bogatyrjov and V.M. Mashinsky, Radiation damage in optical fibers 391 (1997) 417
Gustafsson, H.-Å., see Carlén, L. 391 (1997) 492
Gustafsson, S., see Tecchio, L. 391 (1997) 147

Hamilton, B.J., see Nagaitsev, S. 391 (1997) 32
Hangst, J.S., see Lebedev, V.A. 391 (1997) 176
Hansen, K., see Reinecke, M. 391 (1997) 452
Harrach, D.v., see Aulenbacher, K. 391 (1997) 498
Harston, M., see Aïche, M. 391 (1997) 329
Hartmann, P., see Aulenbacher, K. 391 (1997) 498

Hauffe, J., see PS210 Collaboration . . . 391 (1997) 201
Hedblom, K. and L. Hermansson, Measurements on transverse cooling times and beam profiles in CELSIUS 391 (1997) 37
Helene, O., see Vanin, V.R. . . . 391 (1997) 338
Hemery, J.Y., see Baird, S. . . . 391 (1997) 210
Henderson, R., see Faszer, W. . . . 391 (1997) 507
Hermansson, L., see Hedblom, K. . . . 391 (1997) 37
Hill, C., see Baird, S. . . . 391 (1997) 17
Hoffmann, J., see Aulenbacher, K. . . . 391 (1997) 498
Hoisko, E., see Valtonen, E. . . . 391 (1997) 249
Holmlund, C., see Valtonen, E. . . . 391 (1997) 249

Ivanov, G.N., see Rodin, A.M. . . . 391 (1997) 228
Ivanov, I.N. and V.A. Melnikov, Nonlinear damping of coherent transverse oscillations of a beam in hadron cyclic accelerators and colliders . . . 391 (1997) 52
Ivanov, I.N., see Gleibman, E.M. . . . 391 (1997) 100
Ivanov, S., Longitudinal coupling impedance imposed by a beam feedback in a synchrotron . . . 391 (1997) 64
Ivanova, I.B., see Rodin, A.M. . . . 391 (1997) 228

Jennewein, P., see Aulenbacher, K. . . . 391 (1997) 498
Jones, C.E., see Fedchak, J.A. . . . 391 (1997) 405

Kadnikov, A., see Filipchenko, A. . . . 391 (1997) 160
Kaiser, K.H., see Aulenbacher, K. . . . 391 (1997) 498
Kalinin, A., see Filipchenko, A. . . . 391 (1997) 160
Kananov, S., see Grunhaus, J. . . . 391 (1997) 351
Kartavtsev, O.I. and I.N. Meshkov, Method of in-flight production of exotic systems in charge-exchange reactions . . . 391 (1997) 221
Kasagi, J., see Yamazaki, H. . . . 391 (1997) 427
Katayama, T., see Rao, Y.N. . . . 391 (1997) 42
Kato, S., see Yamazaki, H. . . . 391 (1997) 427
Kelhä, V., see Valtonen, E. . . . 391 (1997) 249
Kenchian, G., see Vanin, V.R. . . . 391 (1997) 338
Kilian, K., see PS210 Collaboration . . . 391 (1997) 201
Kim, D.Y., see Satpathy, A. . . . 391 (1997) 423
Kishore, R., see Collé, R. . . . 391 (1997) 511
Köbis, S., see Aulenbacher, K. . . . 391 (1997) 498
Koivula, E., see Valtonen, E. . . . 391 (1997) 249
Kononov, G.I., see Gleibman, E.M. . . . 391 (1997) 100
Korchuganov, V., see Filipchenko, A. . . . 391 (1997) 160
Korotaev, Yu., see Bosser, J. . . . 391 (1997) 103
Korotaev, Yu., see Bosser, J. . . . 391 (1997) 110
Korotaev, Yu., see Caspers, F. . . . 391 (1997) 128
Koutin, S.V., see Arnold, J.D. . . . 391 (1997) 398
Kowalczyk, R.S., see Fedchak, J.A. . . . 391 (1997) 405
Koziol, H., see Baird, S. . . . 391 (1997) 210
Kreidel, H.J., see Aulenbacher, K. . . . 391 (1997) 498
Krisch, A.D., see Arnold, J.D. . . . 391 (1997) 398
Krylov, Yu., see Filipchenko, A. . . . 391 (1997) 160
Kuksanov, N.K., see Salimov, R.A. . . . 391 (1997) 138
Kulinski, S., see Castellano, M. . . . 391 (1997) 385
Kulipanov, G., see Filipchenko, A. . . . 391 (1997) 160
Kurkin, G., see Filipchenko, A. . . . 391 (1997) 160
Kuzichev, V., see Akimov, D. . . . 391 (1997) 468

Labrador, A., see Lebedev, V.A. . . . 391 (1997) 176
Lamanna, G., see Tecchio, L. . . . 391 (1997) 147
Langbein, J., see Aulenbacher, K. . . . 391 (1997) 498
La Rana, G., see Aïche, M. . . . 391 (1997) 329
Lavrentev, A.Yu., see Rodin, A.M. . . . 391 (1997) 228
Lebedev, A.N., Cooling and heating of a quantum oscillator . . . 391 (1997) 156

Lebedev, N.I., see Gleibman, E.M. 391 (1997) 100
Lebedev, V.A., J.S. Hangst, N. Madsen and A. Labrador, Single and multiple intrabeam scattering in a laser cooled beam 391 (1997) 176
Lee, M.H., see Satpathy, A. 391 (1997) 423
Lenisa, P., see Tecchio, L. 391 (1997) 147
Leppälä, K., see Valtonen, E. 391 (1997) 249
Levichev, E., see Filipchenko, A. 391 (1997) 160
Ley, R., see Baird, S. 391 (1997) 17
Ley, R., see Bosser, J. 391 (1997) 103
Ley, R., see Bosser, J. 391 (1997) 110
Liß, K.-D., see Remhof, A. 391 (1997) 485
Likhachev, A.G., see Gleibman, E.M. 391 (1997) 100
Löhner, H., see Carlén, L. 391 (1997) 492
Lombardi, A., see Baird, S. 391 (1997) 17
Louhola, M., see Valtonen, E. 391 (1997) 249
LoVetere, M., see PS210 Collaboration 391 (1997) 201
Lumme, M., see Valtonen, E. 391 (1997) 249
Luppov, V.G., see Arnold, J.D. 391 (1997) 398

MacLachlan, J.A., Fermilab R&D program in medium energy electron cooling 391 (1997) 131
Maccaferri, R., see Baird, S. 391 (1997) 17
Maccaferri, R., see Baird, S. 391 (1997) 210
Maccaferri, R., see Bosser, J. 391 (1997) 103
Maccaferri, R., see Bosser, J. 391 (1997) 110
Macri, M., see PS210 Collaboration 391 (1997) 201
Madsen, N., see Lebedev, V.A. 391 (1997) 176
Magerl, A., see Remhof, A. 391 (1997) 485
Malakhov, N.A., see Gleibman, E.M. 391 (1997) 100
Malinin, A.B., see Salimov, R.A. 391 (1997) 138
Marinelli, C., see Tecchio, L. 391 (1997) 147
Mariotti, E., see Tecchio, L. 391 (1997) 147
Martínez, G., L. Aphecetche, Y. Charbonnier, H. Delagrange, T. Matulewicz and Y. Schutz, Topology analysis for the identification of energetic photons in a segmented electromagnetic calorimeter 391 (1997) 435
Maruyama, K., see Yamazaki, H. 391 (1997) 427
Mashinsky, V.M., see Gurzhiev, A.N. 391 (1997) 417
Masullo, M.R., see Tecchio, L. 391 (1997) 147
Matulewicz, T., see Martínez, G. 391 (1997) 435
Matveev, Yu., see Filipchenko, A. 391 (1997) 160
Maury, S., see Baird, S. 391 (1997) 17
Maury, S., see Baird, S. 391 (1997) 210
Melnik, Yu.M., see Arnold, J.D. 391 (1997) 398
Melnikov, V.A., Possibilities of technical implementation of nonlinear damping of transversal coherent oscillations of a beam 391 (1997) 93
Melnikov, V.A., see Ivanov, I.N. 391 (1997) 52
Melnikov, V.A., see Gleibman, E.M. 391 (1997) 100
Merker, S.E., see Gleibman, E.M. 391 (1997) 100
Meshkov, I., G. Münzenberg, G. Schrieder, E. Syresin, G.M. Ter Akopian, The investigation of nuclear structure with storage rings – present and future 391 (1997) 224
Meshkov, I.N., Electron cooling – the first 30 years and thereafter 391 (1997) 1
Meshkov, I., E. Syresin, E. Mustafin and P. Zenkevich, Stationary parameters of a neutralized electron cooling system 391 (1997) 107
Meshkov, I., see Baird, S. 391 (1997) 17
Meshkov, I., see Bosser, J. 391 (1997) 103
Meshkov, I., see Bosser, J. 391 (1997) 110
Meshkov, I., see Caspers, F. 391 (1997) 128
Meshkov, I.N. and A.O. Sidorin, Conceptual design of the low energy positron storage ring 391 (1997) 216
Meshkov, I.N. and A.N. Skrinsky, The antihydrogen and positronium generation and studies using storage rings 391 (1997) 205
Meshkov, I.N., see Kartavtsev, O.I. 391 (1997) 221
Metzger, C., see Baird, S. 391 (1997) 210
Metzmacher, K., see Baird, S. 391 (1997) 210
Mikheev, M.S., see Gleibman, E.M. 391 (1997) 100

Millaud, J., see Datte, P. 391 (1997) 471
Minestrini, M., see Castellano, M. 391 (1997) 385
Möhl, D., The status of stochastic cooling 391 (1997) 164
Möhl, D., see Baird, S. 391 (1997) 17
Möhl, D., see Bosser, J. 391 (1997) 110
Möhl, D., see Baird, S. 391 (1997) 210
Moi, L., see Tecchio, L. 391 (1997) 147
Moilanen, M., see Valtonen, E. 391 (1997) 249
Moisio, M.F., see Tecchio, L. 391 (1997) 147
Molinari, G., see Baird, S. 391 (1997) 17
Molinari, G., see Bosser, J. 391 (1997) 103
Molinari, G., see Bosser, J. 391 (1997) 110
Moon, K., see Castelli, C.M. 391 (1997) 481
Moosburger, M., see PS210 Collaboration 391 (1997) 201
Moralles, M., see Vanin, V.R. 391 (1997) 338
Morgunov, V., see Akimov, D. 391 (1997) 468
Moro, R., see Aïche, M. 391 (1997) 329
Mulder, H., see Baird, S. 391 (1997) 17
Mulder, H., see Baird, S. 391 (1997) 210
Münzenberg, G., see Meshkov, I. 391 (1997) 224
Musico, P., see Buzzo, A. 391 (1997) 443
Mustafin, E. and P. Zenkevich, Influence of fast secondary electrons on dipole oscillations in a neutralized electron beam 391 (1997) 123
Mustafin, E., see Meshkov, I. 391 (1997) 107

Nachtigall, Ch., see Aulenbacher, K. 391 (1997) 498
Nagaitsev, S., Electron cooling for the Fermilab recycler 391 (1997) 142
Nagaitsev, S., M.J. Ellison, T.J.P. Ellison, M.S. Ball, V. Derenchuk, B.J. Hamilton and P. Schwandt, Electron cooling of bunched beams in the IUCF cooler: intensity related effects 391 (1997) 32
Nellen, R., see PS210 Collaboration 391 (1997) 201
Nieminen, A., see Valtonen, E. 391 (1997) 249
Nolden, F., see Winkler, T. 391 (1997) 12
Norlin, L.-O., see Thungström, G. 391 (1997) 315
Nurushev, T.S., see Arnold, J.D. 391 (1997) 398
Nygren, D., see Datte, P. 391 (1997) 471
Nystrand, J., see Carlén, L. 391 (1997) 492

Odintsov, D., see Filipchenko, A. 391 (1997) 160
Oelert, W., see PS210 Collaboration 391 (1997) 201
Oganessian, Yu.Ts., see Rodin, A.M. 391 (1997) 228
Okuno, H., see Yamazaki, H. 391 (1997) 427
Oskarsson, A., see Carlén, L. 391 (1997) 492
Otterlund, I., see Carlén, L. 391 (1997) 492

Padmore, H., see Datte, P. 391 (1997) 471
Paić, A., see Tadsen, A. 391 (1997) 310
Pallavicini, M., see Buzzo, A. 391 (1997) 443
Paoluzzi, M., see Baird, S. 391 (1997) 210
Parkhomchuk, V.V., see Tecchio, L. 391 (1997) 147
Pascholati, P.R., see Vanin, V.R. 391 (1997) 338
Passagio, S., see PS210 Collaboration 391 (1997) 201
Patrignani, C., see Buzzo, A. 391 (1997) 443
Patteri, P., see Castellano, M. 391 (1997) 385
Pedersen, F., see Baird, S. 391 (1997) 210
Peltonen, J., see Valtonen, E. 391 (1997) 249
Peltonen, P., see Valtonen, E. 391 (1997) 249
Perevedentsev, E.A., see Danilov, V.V. 391 (1997) 77
Pesterev, S., see Filipchenko, A. 391 (1997) 160
Pestrikov, .V., see Tecchio, L. 391 (1997) 147
Petersson, C.S., see Thungström, G. 391 (1997) 315
Petri, M., see Aulenbacher, K. 391 (1997) 498

Petrov, A., see Caspers, F. 391 (1997) 128
Pilyar, N.V., see Gleibman, E.M. 391 (1997) 100
Pisent, A., see Tecchio, L. 391 (1997) 147
Plützer, S., see Aulenbacher, K. 391 (1997) 498
Poggi, M., see Tecchio, L. 391 (1997) 147
Polyakov, V., see Bosser, J. 391 (1997) 103
Pozzo, A., see PS210 Collaboration 391 (1997) 201
Prudkoglyad, A.F., see Arnold, J.D. 391 (1997) 398
PS210 Collaboration, G. Baur, G. Boero, S. Brauksiepe, A. Buzzo, W. Eyrich, R. Geyer, D. Grzonka, J. Hauffe, K. Kilian, M. LoVetere, M. Macri, M. Moosburger, R. Nellen, W. Oelert, S. Passagio, A. Pozzo, K. Röhrich, K. Sachs, G. Schepers, T. Sefzick, R.S. Simon, R. Stratmann, F. Stinzing and M. Wolke, Production of antihydrogen in relativistic collisions 391 (1997) 201
Pullia, A. and G. Ripamonti, Optimum zero-area filter for nuclear signal sequences 391 (1997) 301

Rao, Y., see Caspers, F. 391 (1997) 128
Rao, Y.N. and T. Katayama, Simulation of electron cooling and intrabeam scattering processes of a heavy ion beam in HIRFL-CSR 391 (1997) 42
Rasolofo, H., see Aïche, M. 391 (1997) 329
Raymond, R.S., see Arnold, J.D. 391 (1997) 398
Reich, H., see Winkler, T. 391 (1997) 12
Reichert, E., see Aulenbacher, K. 391 (1997) 498
Reinecke, M. and K. Hansen, An SDH-based optical transmission-system for applications in High-Energy Physics 391 (1997) 452
Remhof, A., K.-D. Liß and A. Magerl, Neutron diffraction from sound-excited crystals 391 (1997) 485
Rico, J., see García-Raffi, L.M. 391 (1997) 461
Riihonen, E., see Valtonen, E. 391 (1997) 249
Ripamonti, G., see Pullia, A. 391 (1997) 301
Riunaud, J.P., see Baird, S. 391 (1997) 210
Robutti, E., see Buzzo, A. 391 (1997) 443
Rodin, A.M., S.I. Sidorchuk, S.V. Stepantsov, G.M. Ter-Akopian, A.S. Fomichev, R. Wolski, V.B. Galinskiy, G.N. Ivanov, I.B. Ivanova, V.A. Gorshkov, A.Yu. Lavrentev and Yu.Ts. Oganessian, High resolution beam line of the U400M cyclotron and a possibility of RIB accumulation and cooling in the K4 storage ring 391 (1997) 228
Rodríguez-Frías, M.D., see del Peral, L. 391 (1997) 239
Röhrich, K., see PS210 Collaboration 391 (1997) 201
Rubio, B., see García-Raffi, L.M. 391 (1997) 461
Rukojatkina, T.V., see Gleibman, E.M. 391 (1997) 100
Rutigliano, M., see Tecchio, L. 391 (1997) 147
Ruuska, P., see Valtonen, E. 391 (1997) 249
Ryšavý, M., see Dragoun, O. 391 (1997) 345

Sachs, K., see PS210 Collaboration 391 (1997) 201
Sajaev, V., see Filipchenko, A. 391 (1997) 160
Salimov, R.A., N.K. Kuksanov, A.B. Malinin, Electron beam technique for high-voltage electron cooling 391 (1997) 138
Satpathy, A., K. Tamai, M. Fukushima, D.Y. Kim and M.H. Lee, Nuclear counter effect of silicon PIN photodiode used in CsI(Tl) calorimeter 391 (1997) 423
Sawamoto, T., see Yamazaki, H. 391 (1997) 427
Schemies, M., see Aulenbacher, K. 391 (1997) 498
Schepers, G., see PS210 Collaboration 391 (1997) 201
Scheulin, A.S., see Gleibman, E.M. 391 (1997) 100
Scheurer, J.N., see Aïche, M. 391 (1997) 329
Schlitt, B., see Winkler, T. 391 (1997) 12
Schöpe, H.-J., see Aulenbacher, K. 391 (1997) 498
Schrieder, G., see Meshkov, I. 391 (1997) 224
Schutz, Y., see Martínez, G. 391 (1997) 435
Schwandt, P., see Nagaitsev, S. 391 (1997) 32
Sefzick, T., see PS210 Collaboration 391 (1997) 201
Serre, C., see Baird, S. 391 (1997) 210
Shimizu, H., see Yamazaki, H. 391 (1997) 427
Shirkov, G.D., Ion accumulation and space charge neutralization in intensive electron beams for ion sources and electron cooling 391 (1997) 117
Sidorchuk, S.I., see Rodin, A.M. 391 (1997) 228

Sidorin, A.O., see Meshkov, I.N. 391 (1997) 216
Simon, D.J., see Baird, S. 391 (1997) 210
Simon, R.S., see PS210 Collaboration 391 (1997) 201
Sinkus, R. and T. Voss, Particle identification with neural networks using a rotational invariant moment representation 391 (1997) 360
Skrinsky, A.N., Ionization cooling and muon collider 391 (1997) 188
Skrinsky, A.N., see Meshkov, I.N. 391 (1997) 205
Smirnov, G., see Akimov, D. 391 (1997) 468
Smirnov, A., see Bosser, J. 391 (1997) 103
Smirnov, A., see Bosser, J. 391 (1997) 110
Smirnov, A., see Caspers, F. 391 (1997) 128
Söderström, K., see Carlén, L. 391 (1997) 492
Solovov, V., see Akimov, D. 391 (1997) 468
Špalek, A., see Dragoun, O. 391 (1997) 345
Stagno, V., see Tecchio, L. 391 (1997) 147
Stankevich, V., see Filipchenko, A. 391 (1997) 160
Steck, M., see Winkler, T. 391 (1997) 12
Steffens, K.-H., see Aulenbacher, K. 391 (1997) 498
Steigerwald, M., see Aulenbacher, K. 391 (1997) 498
Stenlund, E., see Carlén, L. 391 (1997) 492
Stepantsov, S.V., see Rodin, A.M. 391 (1997) 228
Stinzing, F., see PS210 Collaboration 391 (1997) 201
Strand, S.-E., see Erlandsson, K. 391 (1997) 369
Stratmann, R., see PS210 Collaboration 391 (1997) 201
Strömmer, E., see Valtonen, E. 391 (1997) 249
Svensson, T., see Carlén, L. 391 (1997) 492
Syresin, E., The parameters of the secondary electrons in the electron cooling system 391 (1997) 114
Syresin, E., see Baird, S. 391 (1997) 17
Syresin, E., see Bosser, J. 391 (1997) 103
Syresin, E., see Meshkov, I. 391 (1997) 107
Syresin, E., see Bosser, J. 391 (1997) 110
Syresin, E., see Caspers, F. 391 (1997) 128
Syresin, E., see Meshkov, I. 391 (1997) 224

Tadsen, A., D. Gerber, A. Paić, A. Tripet, D. Twerenbold and J.-L. Vuilleumier, A prototype for the microwave-enhanced bolometer 391 (1997) 310
Taín, J.L., see García-Raffi, L.M. 391 (1997) 461
Tamai, K., see Satpathy, A. 391 (1997) 423
Tanke, E., see Baird, S. 391 (1997) 17
Tazzari, S., see Castellano, M. 391 (1997) 385
Tazzioli, F., see Castellano, M. 391 (1997) 385
Tecchio, L., G. Bisoffi, G. Ciullo, A. Dainelli, S. Gustafsson, M.F. Moisio, A. Pisent, M. Poggi, B. Yang, A. Burov, N.S. Dikansky, D.V. Pestrikov, V.V. Parkhomchuk, R. Calabrese, V. Guidi, P. Lenisa, T. Clauser, G. Lamanna, M. Rutigliano, V. Stagno, V. Variale, G. Di Massa, M.R. Masullo, V.G. Vaccaro, C. Marinelli, E. Mariotti and L. Moi, A storage ring for crystalline beam studies 391 (1997) 147
Teittinen, M., see Valtonen, E. 391 (1997) 249
Ter Akopian, G.M., see Meshkov, I. 391 (1997) 224
Ter-Akopian, G.M., see Rodin, A.M. 391 (1997) 228
Thungström, G., E.J. van Veldhuizen, L. Westerberg, L.-O. Norlin and C.S. Petersson, Fabrication of an integrated ΔE–E-silicon detector by wafer bonding using cobalt disilicide 391 (1997) 315
Torsti, J., see Valtonen, E. 391 (1997) 249
Tranquille, G., see Baird, S. 391 (1997) 17
Tranquille, G., see Bosser, J. 391 (1997) 103
Tranquille, G., see Bosser, J. 391 (1997) 110
Tranquille, G., see Baird, S. 391 (1997) 210
Trautner, H., see Aulenbacher, K. 391 (1997) 498
Tripet, A., see Tadsen, A. 391 (1997) 310
Turchanovich, L.K., see Gurzhiev, A.N. 391 (1997) 417
Turko, B., see Datte, P. 391 (1997) 471
Tuyn, J., see Baird, S. 391 (1997) 210
Twerenbold, D., see Tadsen, A. 391 (1997) 310

Ushakov, V., see Filipchenko, A. 391 (1997) 160
Ushkov, V., see Filipchenko, A. 391 (1997) 160

Vaccaro, V.G., see Tecchio, L. 391 (1997) 147
Valentinov, A., see Filipchenko, A. 391 (1997) 160
Valtonen, E., J. Peltonen, P. Peltonen, T. Eronen, E. Hoisko, M. Louhola, M. Lumme, A. Nieminen, E. Riihonen, M. Teittinen, J. Torsti, K. Ahola, C. Holmlund, V. Kelhä, K. Leppälä, P. Ruuska, E. Strömmer, R. Verkasalo, E. Koivula and M. Moilanen, Energetic and relativistic nuclei and electron experiment of the SOHO mission 391 (1997) 249
Vanin, V.R., G. Kenchian, M. Moralles, O. Helene and P.R. Pascholati, An experimental method for a precise determination of gamma-ray energies with semiconductor detectors 391 (1997) 338
van Veldhuizen, E.J., see Thungström, G. 391 (1997) 315
Vardaci, E., see Aïche, M. 391 (1997) 329
Varenne, F., see Baird, S. 391 (1997) 17
Varenne, F., see Bosser, J. 391 (1997) 103
Varenne, F., see Bosser, J. 391 (1997) 110
Varenne, F., see Caspers, F. 391 (1997) 128
Variale, V., see Tecchio, L. 391 (1997) 147
Vasil'chenko, V.G., see Gurzhiev, A.N. 391 (1997) 417
Verkasalo, R., see Valtonen, E. 391 (1997) 249
Vos, L., Damping of coherent oscillations 391 (1997) 56
Vos, L., Coherent signals from proton bunches beyond the stationary bunch spectrum 391 (1997) 69
Voss, T., see Sinkus, R. 391 (1997) 360
Vretenar, M., see Baird, S. 391 (1997) 17
Vsevolozhskaya, T.A., Kinetics of ionization cooling of muons 391 (1997) 196
Vuilleumier, J.-L., see Tadsen, A. 391 (1997) 310

Weis, Th., see Aulenbacher, K. 391 (1997) 498
Wells, A., see Castelli, C.M. 391 (1997) 481
Werin, S., Second order bunching in an optical klystron 391 (1997) 381
Westerberg, L., see Thungström, G. 391 (1997) 315
Whitehouse, C.R., see Castelli, C.M. 391 (1997) 481
Whitlow, H.J., see Carlén, L. 391 (1997) 492
Williams, B., see Baird, S. 391 (1997) 210
Winkler, T., K. Beckert, F. Bosch, H. Eickhoff, B. Franzke, F. Nolden, H. Reich, B. Schlitt and M. Steck, Electron cooling forces for highly charged ions in the ESR 391 (1997) 12
Wolke, M., see PS210 Collaboration 391 (1997) 201
Wolski, R., see Rodin, A.M. 391 (1997) 228

Xuong, N.-H. see Datte, P. 391 (1997) 471

Yamazaki, H., T. Yorita, H. Yuki, J. Kasagi, S. Kato, H. Shimizu, H.Y. Yoshida, K. Maruyama, H. Okuno and T. Sawamoto, Response of pure CsI to charged pions in the intermediate energy region 391 (1997) 427
Yang, B., see Tecchio, L. 391 (1997) 147
Yang, X., see Caspers, F. 391 (1997) 128
Yorita, T., see Yamazaki, H. 391 (1997) 427
Yoshida, H.Y., see Yamazaki, H. 391 (1997) 427
Yuki, H., see Yamazaki, H. 391 (1997) 427
Yupinov, Yu., see Filipchenko, A. 391 (1997) 160

Zabelin, A., see Filipchenko, A. 391 (1997) 160
Zamfir, N.V., see Barton, C.J. 391 (1997) 289
Zenkevich, P., see Meshkov, I. 391 (1997) 107
Zenkevich, P., see Mustafin, E. 391 (1997) 123
Zhabitsky, V.M., Transverse feedback system with a digital filter 391 (1997) 96
Zhabitsky, V.M., see Gleibman, E.M. 391 (1997) 100
Zilges, A., see Barton, C.J. 391 (1997) 289

ELSEVIER

Nuclear Instruments and Methods in Physics Research A 391 (1997) 539–542

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH Section A

Subject index

Accelerators, Beam Handling and Targets

Proceedings of the Eleventh International Advanced ICFA Beam Dynamic Workshop on Beam Cooling and Instability Damping
(On board a ship from Moscow to Nizhny Novgorod, June 18–26, 1996)

Section I. Electron cooling physics

Electron cooling – the first 30 years and thereafter, I.N.Meshkov 391 (1997) 1
Electron cooling forces for highly charged ions in the ESR, T. Winkler, K. Beckert, F. Bosch, H. Eickhoff, B. Franzke, F. Nolden, H. Reich, B. Schlitt and M. Steck. 391 (1997) 12
Recent results on lead-ion accumulation in LEAR for the LHC, S. Baird, J. Bosser, J. Broere, C. Carli, M. Chanel, C. Hill, R. Ley, A. Lombardi, R. Maccaferri, S. Maury, I. Meshkov, D. Möhl, G. Molinari, H. Mulder, E. Syresin, E. Tanke, G. Tranquille, F. Varenne and M. Vretenar. 391 (1997) 17
Electron cooling at CRYRING with an expanded electron beam, H. Danared. 391 (1997) 24
Electron cooling of bunched beams in the IUCF cooler: intensity related effects, S. Nagaitsev, M.J. Ellison, T.J.P. Ellison, M.S. Ball, V. Derenchuk, B.J. Hamilton and P. Schwandt 391 (1997) 32
Measurements on transverse cooling times and beam profiles in CELSIUS, K. Hedblom and L. Hermansson 391 (1997) 37
Simulation of electron cooling and intrabeam scattering processes of a heavy ion beam in HIRFL-CSR, Y.N. Rao and T. Katayama 391 (1997) 42

Section II. Damping of coherent oscillations

Nonlinear damping of coherent transverse oscillations of a beam in hadron cyclic accelerators and colliders, I.N. Ivanov and V.A. Melnikov. 391 (1997) 52
Damping of coherent oscillations, L. Vos. 391 (1997) 56
Longitudinal coupling impedance imposed by a beam feedback in a synchrotron, S. Ivanov 391 (1997) 64
Coherent signals from proton bunches beyond the stationary bunch spectrum, L. Vos. 391 (1997) 69
On the emittance growth due to noise in hadron colliders and methods of its suppression, Y.I. Alexahin 391 (1997) 73
Feedback system for elimination of the transverse mode coupling instability, V.V. Danilov and E.A. Perevedentsev 391 (1997) 77
Possibilities of technical implementation of nonlinear damping of transversal coherent oscillations of a beam, V.A. Melnikov 391 (1997) 93
Transverse feedback system with a digital filter, V.M. Zhabitsky. 391 (1997) 96
System for initial betatron oscillation damping for UNK I stage beam, E.M. Gleibman, V.M. Zhabitsky, I.N. Ivanov, G.I. Kononov, N.I. Lebedev, A.G. Likhachev, V.A. Melnikov, N.A. Malakhov, N.V. Pilyar, T.V. Rukojatkina, A.S. Scheulin, S.E. Merker and M.S. Mikheev 391 (1997) 100

Section III. Physics of electron beam in electron cooling

Experimental studies of electron beam neutralisation, J. Bosser, R. Ley, Yu. Korotaev, R. Maccaferri, I. Meshkov, G. Molinari, V. Polyakov, A. Smirnov, E. Syresin, G. Tranquille and F. Varenne 391 (1997) 103
Stationary parameters of a neutralized electron cooling system, I. Meshkov, E. Syresin, E. Mustafin and P. Zenkevich 391 (1997) 107
Active methods of instability suppression in a neutralized electron beam, J. Bosser, R. Ley, Yu. Korotaev, R. Maccaferri, I. Meshkov, D. Mohl, G. Molinari, A. Smirnov, E. Syresin, G. Tranquille and F. Varenne 391 (1997) 110
The parameters of the secondary electrons in the electron cooling system, E. Syresin. 391 (1997) 114
Ion accumulation and space charge neutralization in intensive electron beams for ion sources and electron cooling, G.D. Shirkov. 391 (1997) 117

0168-9002/97/$17.00 Copyright © 1997 Elsevier Science B.V. All rights reserved

Influence of fast secondary electrons on dipole oscillations in a neutralized electron beam, E. Mustafin and P. Zenkevich 391 (1997) 123
Diagnostics of a neutralised electron beam on the JINR test bench, F. Caspers, Yu. Korotaev, I. Meshkov, A. Petrov, Y. Rao, A. Smirnov, E. Syresin, F. Varenne and X. Yang 391 (1997) 128

Section IV. Advanced electron cooling technique

Fermilab R&D program in medium energy electron cooling, J.A. MacLachlan 391 (1997) 131
Electron beam technique for high-voltage electron cooling, R.A. Salimov, N.K. Kuksanov and A.B. Malinin. 391 (1997) 138
Electron cooling for the Fermilab recycler, S. Nagaitsev 391 (1997) 142

Section V. Crystalline beams

A storage ring for crystalline beam studies, L. Tecchio, G. Bisoffi, G. Ciullo, A. Dainelli, S. Gustafsson, M.F. Moisio, A. Pisent, M. Poggi, B. Yang, A. Burov, N.S. Dikansky, D.V. Pestrikov, V.V. Parkhomchuk, R. Calabrese, V. Guidi, P. Lenisa, T. Clauser, G. Lamanna, M. Rutigliano, V. Stagno, V. Variale, G. Di Massa, M.R. Masullo, V.G. Vaccaro, C. Marinelli, E. Mariotti and L. Moi. 391 (1997) 147
Cooling and heating of a quantum oscillator, A.N. Lebedev 391 (1997) 156

Section VI. Synchrotron radiation

First results obtained for the KSRS design parameters, A. Filipchenko, E. Gorniker, A. Kalinin, V. Korchuganov, G. Kulipanov, G. Kurkin, E. Levichev, Yu. Matveev, V. Sajaev, V. Ushakov, A. Kadnikov, Yu. Krylov, D. Odintsov, S. Pesterev, V. Stankevich, V. Ushkov, A. Valentinov, Yu. Yupinov and A. Zabelin 391 (1997) 160

Section VII. Stochastic cooling

The status of stochastic cooling, D. Möhl 391 (1997) 164
Stochastic cooling at Fermilab, M. Church. 391 (1997) 172

Section VIII. Laser cooling in storage rings

Single and multiple intrabeam scattering in a laser cooled beam, V.A. Lebedev, J.S. Hangst, N. Madsen and A. Labrador 391 (1997) 176

Section IX. Muon cooling

Ionization cooling and muon collider, A.N. Skrinsky. 391 (1997) 188
Kinetics of ionization cooling of muons, T.A. Vsevolozhskaya 391 (1997) 196

Section X. Exotic beam generation

Production of antihydrogen in relativistic collisions, PS210 Collaboration, G. Baur, G. Boero, S. Brauksiepe, A. Buzzo, W. Eyrich, R. Geyer, D. Grzonka, J. Hauffe, K. Kilian, M. LoVetere, M. Macri, M. Moosburger, R. Nellen, W. Oelert, S. Passagio, A. Pozzo, K. Röhrich, K. Sachs, G. Schepers, T. Sefzick, R.S. Simon, R. Stratmann, F. Stinzing and M. Wolke. 391 (1997) 201
The antihydrogen and positronium generation and studies using storage rings, I.N. Meshkov and A.N. Skrinsky 391 (1997) 205
The Antiproton Decelerator: AD, S. Baird, D. Berlin, J. Boillot, J. Bosser, M. Brouet, J. Buttkus, F. Caspers, V. Chohan, D. Dekkers, T. Eriksson, R. Garoby, R. Giannini, O. Grobner, J. Gruber, J.Y. Hemery, H. Koziol, R. Maccaferri, S. Maury, C. Metzger, K. Metzmacher, D. Möhl, H. Mulder, M. Paoluzzi, F. Pedersen, J.P. Riunaud, C. Serre, D.J. Simon, G. Tranquille, J. Tuyn and B. Williams 391 (1997) 210
Conceptual design of the low energy positron storage ring, I.N. Meshkov and A.O. Sidorin 391 (1997) 216
Method of in-flight production of exotic systems in charge-exchange reactions, O.I. Kartavtsev and I.N. Meshkov 391 (1997) 221
The investigation of nuclear structure with storage rings – present and future, I. Meshkov, G. Münzenberg, G. Schrieder, E. Syresin and G.M. Ter Akopian 391 (1997) 224
High resolution beam line of the U400M cyclotron and a possibility of RIB accumulation and cooling in the K4 storage ring, A.M. Rodin, S.I. Sidorchuk, S.V. Stepantsov, G.M. Ter-Akopian, A.S. Fomichev, R. Wolski, V.B. Galinskiy, G.N. Ivanov, I.B. Ivanova, V.A. Gorshkov, A.Yu. Lavrentev and Yu.Ts. Oganessian 391 (1997) 228

Commissioning and operating experience with the LISA superconducting accelerator, M. Castellano, L. Catani, M. Ferrario, S. Kulinski, M. Minestrini, P. Patteri, S. Tazzari and F. Tazzioli 391 (1997) 385
A cryocondensation pump for a high-density atomic hydrogen jet target, J.D. Arnold, S.V. Koutin, A.D. Krisch, V.G. Luppov, T.S. Nurushev, R.S. Raymond, Yu.M. Melnik and A.F. Prudkoglyad 391 (1997) 398
Silane coatings for laser-driven polarized hydrogen sources and targets, J.A. Fedchak, P. Cabauy, W.J. Cummings, C.E. Jones and R.S. Kowalczyk 391 (1997) 405

High Energy Physics Detectors

Radiation damage in optical fibers, A.N. Gurzhiev, L.K. Turchanovich, V.G. Vasil'chenko, V.A. Bogatyrjov and V.M. Mashinsky 391 (1997) 417
Nuclear counter effect of silicon PIN photodiode used in CsI(Tl) calorimeter, A. Satpathy, K. Tamai, M. Fukushima, D.Y. Kim and M.H. Lee. 391 (1997) 423
Response of pure CsI to charged pions in the intermediate energy region, H. Yamazaki, T. Yorita, H. Yuki, J. Kasagi, S. Kato, H. Shimizu, H.Y. Yoshida, K. Maruyama, H. Okuno and T. Sawamoto. 391 (1997) 427
Topology analysis for the identification of energetic photons in a segmented electromagnetic calorimeter, G. Martínez, L. Aphecetche, Y. Charbonnier, H. Delagrange, T. Matulewicz and Y. Schutz 391 (1997) 435
A Silicon Pad Detector for E-835 experiment at Fermilab, A. Buzzo, P. Musico, M. Pallavicini, C. Patrignani and E. Robutti. 391 (1997) 443

High Energy Physics Systems

An SDH-based optical transmission-system for applications in High-Energy Physics, M. Reinecke and K. Hansen 391 (1997) 452

Space Radiation and Neutrino Detectors

Method to infer about the nuclear UHE cosmic-ray composition from the EAS lateral development, L. del Peral and M.D. Rodríguez-Frías 391 (1997) 239
Energetic and relativistic nuclei and electron experiment of the SOHO mission, E.Valtonen, J. Peltonen, P. Peltonen, T. Eronen, E. Hoisko, M. Louhola, M. Lumme, A. Nieminen, E. Riihonen, M. Teittinen, J. Torsti, K. Ahola, C. Holmlund, V. Kelhä, K. Leppälä, P. Ruuska, E. Strömmer, R. Verkasalo, E. Koivula and M. Moilanen 391 (1997) 249
Monte Carlo simulation of the ARGO, G.O. Depaola 391 (1997) 269

Nuclear Spectroscopy

Determination of radioisotopes in gamma-ray spectroscopy using abductive machine learning, R.E. Abdel-Aal and M.N. Al-Haddad 391 (1997) 275
Coulomb excitation of radioactive nuclear beams in inverse kinematics, C.J. Barton, R.L. Gill, R.F. Casten, D.S. Brenner, N.V. Zamfir and A. Zilges 391 (1997) 289
Optimum zero-area filter for nuclear signal sequences, A. Pullia and G. Ripamonti 391 (1997) 301

Gamma, X-ray and Charged Particle Detectors

A prototype for the microwave-enhanced bolometer, A. Tadsen, D. Gerber, A. Paić, A. Tripet, D. Twerenbold and J.-L. Vuilleumier 391 (1997) 310
Fabrication of an integrated $\Delta E - E$-silicon detector by wafer bonding using cobalt disilicide, G. Thungström, E.J. van Veldhuizen, L. Westerberg, L.-O. Norlin and C.S. Petersson 391 (1997) 315
Monte Carlo simulation of Compton polarimeters, L.M. García-Raffi, J.L. Taín, J. Bea, A. Gadea, J. Rico and B. Rubio 391 (1997) 461
Scintillation proportional Xe counter with WLS fiber readout for low-energy X-rays, D. Akimov, S. Belogurov, A. Burenkov, D. Churakov, V. Kuzichev, V. Morgunov, G. Smirnov and V. Solovov 391 (1997) 468
A prototype 8×8 pixel array X-ray detector for protein crystallography, P. Datte, E. Beuville, J.-F. Beche, C. Cork, T. Earnest, J. Millaud, D. Nygren, H. Padmore, B. Turko and N.-H. Xuong 391 (1997) 471
CCDs for X-ray topography at synchrotrons, C.M. Castelli, N.M. Allinson, S.J. Barnett, G.F. Clark, K. Moon, C.R. Whitehouse and A. Wells 391 (1997) 481

Neutron Physics

Neutron diffraction from sound-excited crystals, A. Remhof, K.-D. Liß and A. Magerl 391 (1997) 485

Electronics

The DIAMANT electronics and data acquisition system, M. Aïche, M.M. Aléonard, B. Balauge, G. Barreau, F. Bourgine, D. Cabaussel, J.F. Chemin, C. Diarra, J.P. Goudour, M. Harston, H. Rasolofo, J.N. Scheurer, A. Brondi, G. La Rana, R. Moro, E. Vardaci and D. Curien 391 (1997) 329
Two-dimensional electronic readout system for multi-step-avalanche chambers, L. Carlén, S. Garpman, H.-Å. Gustafsson, H. Löhner, J. Nystrand, A. Oskarsson, I. Otterlund, T. Svensson, E. Stenlund, K. Söderström and H.J. Whitlow 391 (1997) 492

Numerical and Data Analysis

An experimental method for a precise determination of gamma-ray energies with semiconductor detectors, V.R. Vanin, G. Kenchian, M. Moralles, O. Helene and P.R. Pascholati 391 (1997) 338
Statistical tests of invariability of the measurement conditions in the β-ray spectroscopy, O. Dragoun, M. Ryšavý and A. Špalek 391 (1997) 345
Separation of γ/π^0 showers at high energies, J. Grunhaus and S. Kananov 391 (1997) 351
Particle identification with neural networks using a rotational invariant moment representation, R. Sinkus and T. Voss 391 (1997) 360

Medical Applications and Dosimetry

3D reconstruction for 2D PET, K. Erlandsson and S.-E. Strand 391 (1997) 369

Synchrotron Radiation Research

Transition Undulator Radiation (TUR) as a beam diagnostics and a high brilliance infrared source, M. Castellano 391 (1997) 375
Second order bunching in an optical klystron, S. Werin 391 (1997) 381

Special Applications

The MAMI source of polarized electrons, K. Aulenbacher, Ch. Nachtigall, H.G. Andresen, J. Bermuth, Th. Dombo, P. Drescher, H. Euteneuer, H. Fischer, D.v. Harrach, P. Hartmann, J. Hoffmann, P. Jennewein, K.H. Kaiser, S. Köbis, H.J. Kreidel, J. Langbein, M. Petri, S. Plützer, E. Reichert, M. Schemies, H.-J. Schöpe, K.-H. Steffens, M. Steigerwald, H. Trautner and Th. Weis 391 (1997) 498
A wire stringing machine for multiwire proportional chambers and planar drift chambers, W. Faszer and R. Henderson 391 (1997) 507
An update on the NIST random-in-water standard generator: its performance efficacy and long-term stability, R. Collé and R. Kishore 391 (1997) 511